SounPacific
Environmental Services
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Subsurface Investigation Workplan

Site:

McKinleyville 76 (Big Oil & Tire – McKinleyville BP)
2698 Central Avenue
McKinleyville, California 95519

LOP # 12341

Prepared for:

Big Oil & Tire Co.

Dated:

September 12, 2005

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1.0 INTRODUCTION

This *Subsurface Investigation Workplan (Workplan)* has been prepared by SounPacific on behalf of Big Oil & Tire Co. (BO&T) for the McKinleyville 76 leaking underground facility tank (LUFT) site. This *Workplan* was developed per the letter dated February 13, 2003, from Humboldt County Department of Health and Human Services: Division of Environmental Health (HCDEH), which requested SounPacific to propose a workplan for evaluating the source and investigating the downgradient extent of MTBE in water.

1.1 Scope of Work

Based on North Coast Regional Water Quality Control Board (NCRWQCB) guidelines and verbal communications with HCDEH, the proposed scope of work at this stage in the project is as follows:

- Installation of five (5) offsite borings to assist in the vertical delineation of the identified groundwater contamination off. Installation of an offsite monitoring well into one of the borings.

- Installation of one (1) groundwater monitoring well to replace monitoring well MW-5 that had been destroyed during the recent excavation of contaminated soil.

- Collect soil and groundwater samples to further delineate soil and/or groundwater contamination at the site.

- Determine the nature and levels of any contamination by:
    - Sampling of soil using EPA Method 5035 and analysis using EPA Methods 8260 and 8015.
    - Analysis of groundwater using EPA Methods 8260 and 8015.

- Incorporation of the new monitoring wells in the current groundwater monitoring program.

- Preparation of a Report of Findings that documents the activities, findings, and results of the proposed investigation, and propose recommendations for further activities.

1.2 Site Location

The McKinleyville 76 Service Station facility (the Site) is a located in McKinleyville, California, with a physical street address of 2698 Central Avenue, McKinleyville, California. The site resides within the NE ¼ of the NE 1/4, Sec 31, T7N, and R1E of McKinleyville. The station is positioned on the northwest corner at the intersection of Central Avenue and Reasor Road. The site is located approximately 1.5 miles north of downtown McKinleyville. The nearest major intersection to the site is that of Central Avenue and Murray Road, which is located approximately 300 feet north of the site (Figure 1).

1.3 Site Description

Site improvements include a single story building with a separate canopy awning that covers two dispenser islands. The structure is approximately 800 square feet in size and is positioned near the western property line facing east towards Central Avenue. The site is surfaced around the current structure with concrete and asphalt.

Two (2) sets of new dispensers currently distribute various grades of gasoline fuel to retail customers. There is currently one (1) 15,000-gallon split compartmented UST containing regular unleaded gasoline and premium-unleaded gasoline, which is located just south of the dispenser islands, approximately 18 feet from the southern property line. Sewer and water services are supplied by public utilities. Drainage ditches and municipal

storm sewers control surface water runoff. All electrical and telephone lines are above ground (Figure 2).

1.4 Vicinity Description

The surrounding land use in the vicinity of the Site is a mixture of commercial and residential. Properties to the immediate north and south of the site are commercial with residential properties located to the east and west of the site. This site is bordered on the south by Reasor Road and to the east by Central Avenue. An apartment complex is located adjacent to the west of the property (Figure 2).

1.5 Topography and Geologic Setting

Site topography is relatively flat, at an elevation of approximately 115 feet above mean sea level (amsl). Surrounding topography consists of rolling terrain that gently slopes to the west toward the Pacific Ocean. The site is located approximately 1.5 miles east of the Pacific Ocean. According to USGS maps, the site is located approximately 1,000 feet south of Norton Creek and 1,000 feet north of Widow White Creek (Figure 1). Quarterly water level measurements from the groundwater-monitoring program determined that groundwater levels ranged from 1.22 feet to 8.21 feet below ground surface (bgs) (Table 1).

This site is located on the uplifted Savage Creek Marine Terrace. The Savage Creek Marine Terrace deposits consist mainly of sand, with minor amounts of silt, clay, and gravel. These sediments were deposited on wave-cut benches that have since become exposed through tectonic uplift and changes in sea level. These marine terrace deposits are typically up to a few tens of feet thick and are late Pleistocene in age (Carver and Burke, 1992).

1.6 Hydrogeologic Setting

The recent investigation that was conducted on June 22, 2005 indicated that groundwater was present at approximately three to four feet below ground surface (bgs) and is presumed to be flowing in a southwesterly direction with only a slight grade (0.002 ft/ft) (Table 1).

1.7 Current Site Usage & UST History

SounPacific understands that the property is owned by BO&T of Arcata, California. The Site is used as a retail service station for dispensing three (3) grades of unleaded gasoline from the USTs on site. A mini-mart combined with a cashiers' office is located within a building on the Site.

In December 2003, three (3) single-walled steel USTs that had been used to store gasoline were removed. The tanks had been installed in the mid 1980's, and were leak tested annually from 1987 to 1991, during which period no leaks were detected. In 1992, the USTs were epoxy lined and an electronic monitoring system was installed. In December 1996, a 550-gallon waste oil tank was removed from the site. Laboratory analysis of soil and groundwater samples collected during the removal of the waste oil tank indicated a release of petroleum hydrocarbons had occurred. On January 28, 1997, a leak was indicated during a routine product line test of the gasoline UST system. Subsequent evaluation indicated that a product line had leaked near the south end of the eastern pump island. The line was repaired and the fuel system was put back into service.

In November 2003, Beacom installed one (1) 15,000-gallon split compartmented UST. Regular gasoline is stored in a 10,000-gallon compartment and premium gasoline is stored in the remaining 5,000-gallon compartment. Mid-grade gasoline is dispensed through a fuel mixer, which combines regular and premium gasoline. Two dispensers and associated electrical and product lines were installed during the upgrade.

2.0 PREVIOUS INVESTIGATIONS

2.1 1991 Waste Oil UST Cleaning (Sessions)

On March 1, 1991, Sessions Tank Liners, Inc. (Sessions) exposed the top of the 550-gallon waste oil tank and cleaned the interior by steam cleaning. HCDEH observed the procedure and noted that gasoline and waste oil constituent contamination were visible in the soils surrounding the waste oil tank.

2.2 1996 Waste Oil UST Removal (Beacom)

On December 12, 1996, a waste oil UST was removed by Beacom Construction (Beacom) from the Site. From the tank excavation, a soil sample and a groundwater sample were collected for laboratory analysis (Figure 3). The soil and groundwater samples were analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg), benzene, toluene, xylenes, and ethylbenzene (BTXE), TPH as diesel (TPHd), TPH as motor oil (TPHmo), total lead, total oil and grease (TOG), chromium, and zinc. Analysis of both the soil and groundwater samples reported the presence of petroleum hydrocarbons in both the gasoline and motor oil range, along with elevated levels of the BTXE compounds. The laboratory results for the soil and groundwater samples are summarized in Tables 2 and 3, respectively.

2.3 1997 Product Line Test (Beacom)

During pressure testing of the product lines at the Site in January 1997, a leak was identified. The product line was exposed by Beacom and a leak was detected at a plumbing fitting near the south end of the eastern pump island. Mr. Brent Whitner of HCDEH observed the excavation and noted apparent gasoline product in the soil near the line. Mr. Whitner's notes indicated that 5 to 10 gallons of gasoline were recovered from the excavation during the repair process.

2.4 1997 Subsurface Investigation (CGI)

On March 25, 1997, Clearwater Group, Inc., (CGI) performed a subsurface investigation at the site, which consisted of drilling eight (8) soil borings (B-1, B-2, B-3, B-4, B-5, MW-1, MW-2 and MW-3, Figure 3). Two-inch groundwater monitoring wells were installed in the three (3) soil borings, MW-1, MW-2, and MW-3. A single soil sample was collected from each boring and analyzed for TPHg, BTXE, methyl tertiary butyl ether (MTBE), total lead, TPHd, and TPHmo. Laboratory analysis reported the highest levels of soil contamination in borings B-5 and MW-3, adjacent to the fuel islands. The results of the soil analyses are included in Table 2.

2.5 2000 Subsurface Investigation (SounPacific)

On October 25, 2000, SounPacific staff performed a subsurface investigation at the Site in accordance with a CGI approved workplan, of October 20, 1998. The investigation consisted of drilling nine (9) soil borings (B-6, B-7, B-8, B-9, B-10, B-11, B-12, B-13, and B-14, Figure 3). Soil and grab groundwater samples were collected from each borehole and analyzed for TPHg, BTXE, MTBE, TPHd, and TPHmo. Soil samples from depths of five (5) and ten (10) feet below ground surface (bgs) were analyzed from each boring. Laboratory analysis of these samples did not identify any significant soil contamination. The only petroleum hydrocarbons reported were in the diesel and motor oil ranges, at concentration less than 20 ppm in boring B-7, and a low level of MTBE in boring B-9. Boring B-7 is on the eastern margin of the site and boring B-9 is on the site's western boundary. Total petroleum hydrocarbons were identified in grab groundwater samples from borings B-9 and B-12, with the highest levels in boring B-9. MTBE was reported in the grab groundwater sample from four locations that included B-11 and B-13, in addition to B-9 and B-12. The laboratory results for the soil and groundwater are included in Tables 2 and 3, respectively.

2.6 2002 Subsurface Investigation (SounPacific)

Further subsurface investigation was conducted at the Site in April and June of 2002. In

April 2002, SounPacific hand augured three (3) soil borings (B-15, B-16, and B-17) on the property, to the west of the Site (Figure 3). These borings were used for the procurement of groundwater samples only, in order to assist in the delineation of the groundwater contamination. Laboratory analysis of the groundwater samples, reported petroleum hydrocarbons in the sample from location B-17 only, the southernmost location, which reported TPHg, MTBE, and TAME. Toluene was also reported in B-17 and the sample from B-15, however, the low levels reported were assumed to be laboratory contaminant. The analytical results for the soil and groundwater samples from the investigation are included in Tables 2 and 3.

On June 17, 2002, further subsurface investigation was conducted that consisted of drilling one (1) soil boring (B-18) to the southwest of the property on Reasor Road, and the drilling and installation of three (3), two-inch diameter groundwater monitoring wells (MW-4, MW-5, and MW-6). Soil and a grab groundwater samples were collected from boring B-18, along with one soil sample from boring MW-4 and two soil samples from soil boring MW-5. All soil and groundwater samples were analyzed for TPHg, BTXE, MTBE, four (4) fuel oxygenates, TPHd, and TPHmo. With the exception of MTBE in the groundwater, no petroleum hydrocarbons were reported in either the soil or the groundwater from boring B-18. At location MW-4, a low level of TPHmo was reported, however, at location MW-5, in the central area of the site adjacent to the fuel islands, elevated levels of TPHg, TPHd, BTXE, and MTBE were reported in both soil samples. The laboratory results for the soil and groundwater samples are included in Tables 2 and 3, respectfully. In addition, the monitoring wells were incorporated into a groundwater monitoring program. The initial sampling results reported elevated levels of petroleum hydrocarbons in all three (3) wells (Table 4).

2.7 2003 UST INSTALLATION (Beacom)

On October 6, 2003, Beacom conducted a subsurface geotechnical investigation that included the collection of soil and groundwater samples, to evaluate soil conditions related to the installation of a new UST system. One soil sample (McK 76-2) and one (1)

groundwater sample (McK 76-1) were collected and analyzed for TPHg and TPHd (Figure 4). Analytical results from the soil sample indicated non-detectable levels of petroleum hydrocarbons and the soil was stockpiled on site. However, groundwater was determined to be impacted with both TPHg and TPHd. Results of the groundwater analysis are displayed in Table 3.

On October 28-29, 2003, Beacom conducted further site evaluation activities by excavating a UST pit and product line trenches for the installation of the new dual-walled 15,000-gallon split compartmented gasoline UST, associated product lines, and dispenser system. The soil that was removed during these activities was combined with the preliminary test pit soil. Sixteen (16) soil samples (MCK 76 SP1 through MCK 76 SP16) were collected from this stockpile and analyzed for TPHg, TPHd, and total lead in order to ensure that the soil could be used as fill for the future UST removal. The number of soil samples was at the direct request of HCDEH staff, and was to ensure that only clean soil was placed back in the excavation. Additionally, HCDEH staff requested that a leachate study be performed on the four (4) most contaminated samples. Of the sixteen (16) samples, four (4) samples reported TPHg at levels ranging between 1.1 ppm and 6.0 ppm, and one sample reported TPHd at 23 ppm. No TPHg or TPHd were reported in the remaining samples. Total lead values ranged between 2.1 ppm and 190 ppm. Based upon this analysis, samples MCK76SP-2, 3, 6, and 8, were selected for leachate analysis, with soil samples MCK76-1 through MCK76-4 corresponded to sample locations MCK76SP-2, 3, 6, and 8 respectfully. None of the four (4) samples reported any leachable TPHg, TPHd, or BTXE. Based on these results it was determined that the stockpiled soil could be used on-site for backfilling purposes. In addition to the stockpile soil samples, a water sample was collected from the tank test pit. Laboratory analysis reported the presence of elevated levels of TPHg and MTBE, with low levels of benzene, xylenes, and ethylbenzene. The results of the groundwater analysis are summarized in Table 3.

The new UST system was installed in the southern portion of the property during November 2003. The new tank system was installed prior to the old USTs being

removed, allowing the service station to remain in business during the construction activities.

2.8 2003 EXCAVATION AND SOIL REMOVAL (Beacom)

On December 22, 2003, Beacom removed the three former gasoline USTs. Following the removal of the USTs, SounPacific staff collected samples for Photo Ionization Detector (PID) analysis while continuing excavation activities to remove the contaminated soil, in accordance with the approved workplan. The objective was to remove as much of the contaminated soil as practically and reasonably as possible. During the course of activities, monitoring well MW-5 was destroyed. All investigative work was performed in accordance with the approved SounPacific *Excavation Workplan*, dated November 26, 2003.

As excavation activity progressed, a PID was continuously used to monitor soil excavation tailings and sidewalls as described in the approved workplan. Five (5) soil samples (DI-1 through DI-5) were collected from the sidewalls at five (5) locations in order to verify the limits of excavation and PID reading accuracy. The locations of these samples are shown in Figure 4, with the analytical results presented in Table 2. Groundwater from the excavation pit was pumped out to collect any floating product that may be present and to remove as much contaminated groundwater as practical. The removed water was stored on-site in a portable storage tank. A water sample (McK 76 WT17) from the water tank was collected and analyzed to determine hydrocarbon concentrations. Laboratory analysis of the water sample reported elevated levels of all petroleum hydrocarbons; the analytical results are included in Table 3. The collected water (1,350-gallons) was subsequently removed and disposed of by Chico Drain Oil.

The excavated soil was stockpiled on site in an area separated from the soil that was removed during the test pit excavation and UST system installation. The proposed excavation did not completely remove all the in-situ contaminated soil due to a lack of on-site storage space for the excavated soil and heavy rain conditions. The excavation

was backfilled with the stockpiled soil from the earlier UST installation that had been deemed suitable for on-site use based on the results of laboratory analytical and the leachability studies.

The stockpiled contaminated soil was removed from the site by Beacom on February 9-11, 2004 and transported to Bio Industries in Red Bluff, California for disposal. Prior to being accepted by Bio Industries, analysis for total lead was analyzed on three (3) randomly selected representative soil samples (SS-NORTH, SS-SOUTH, and SS-MIDDLE) and testing was conducted on two soil samples (DI-1 and DI-2), where TPHg levels exceeded 3,000-ppm. Results from this sampling indicated that the soil was not toxic.

2.9 2004 Subsurface Investigation (SounPacific)

The December 2003 excavation did not remove all the contaminated soil, therefore during the period between September 23 through 27, 2004, SounPacific conducted further site characterization to delineate the extent of the remaining soil contamination. Twelve (12) borings (B-19, B-20, B-21, B-22, B-23, B-24, B-25, B-26, B-27, B-28, B-29, and B-30) were drilled and soil samples were collected for analysis. From each boring, three (3) soil samples, from depths of 4', 8', and 10' bgs were collected for laboratory analysis. The boring locations were to the north, east, and west of the December 2003 remedial excavation, as shown in Figure 4. The thirty-six (36) soil samples from the twelve (12) borings were analyzed for TPHg, BTXE, and five-fuel oxygenates.

Boring B-19 was located to the east of the original soil excavation pit. While located in an area of suspected soil contamination, further excavation in the direction of B-19 would not be possible due to the presences of the site's office building. Hydrocarbon contamination concentrations, in B-19 were relatively low, with TPHg concentrations in all three (3) samples being less than 3 ppm. In addition, concentrations of any BTXE compound were less than 4 ppm and the highest MTBE concentration was 6.2 ppm. It was therefore determined that no further remedial action was required in this area.

Three borings (B-23, B-24, and B-25) were drilled to the north of the site of the former USTs (Figure 4). Laboratory analytical results of the nine samples collected from the three borings to the north, only reported TPHg in one sample (1.3 ppm in sample SB-24 @ 4'). BTXE compounds were commonly non-detect, and if present were less than 0.015 ppm. The highest MTBE concentration was 0.17 ppm. It was therefore concluded that no further remedial excavation would be required north of the former UST area.

The remaining eight (8) borings were located to the east of original excavation. Three (3) borings (B-20, B-21, and B-22) were located along a north-south axis directly east of the edge of the original excavation. Laboratory analytical results of these three (3) borings indicated the highest levels of hydrocarbon contamination concentrations at 4 feet bgs with TPHg at concentrations of 1,800 ppm (B-20) 3,600 ppm (B-21) and 570 ppm (B-22). In all three (3) borings, hydrocarbon contamination concentrations decrease dramatically with depth, with the maximum TPHg concentration at 10 feet bgs being 5.9 ppm. With the exception of the 4 feet bgs samples in B-20 and B-21, the levels of the BTXE compounds were generally low. The highest concentration of MTBE (6.6 ppm) was reported in B-20 at 4 feet bgs. The next three step-out borings (B-26, B-27, and B-28) were located approximately 10 feet further east than the initial borings in this area, and the final two borings (B-29 and B-30) were located a further 10 feet to the east. As step-out borings proceeded to the east, hydrocarbon contaminations continued to decrease both in the easterly direction and with depth. However, TPHg concentrations still exceed 250 ppm in the shallow samples. The full soil analytical results for all the 12 step-out borings are presented in Table 2.

2.10 2004 Soil Excavation

The September 2004 investigation delineated the extent of contaminated soil that remained and required remedial action. The excavation of the remaining known contaminated soil was implemented on December 1, 2004, with the objective of removing the accessible contaminated soil that had a TPHg level in excess of 100 ppm,

based on laboratory results. To monitor contaminant levels and to ensure only contaminated soil was removed, the removed soil and the excavation sidewalls were continuously screened using a PID as the excavation progressed.

The excavation was initiated on December 1, 2004 in an area of confirmed contamination, and continued until December 3, 2004, when clean-up objectives had been achieved in all accessible areas However, in two locations it was not possible to meet this objective due to the hazard of compromising structural integrities. These areas were the dispenser island west of the excavated pit and the drainage ditch along Central Ave.

At the completion of the removal activities, an area of approximately 50 feet by 35 feet and to a depth of between eight (8) and eleven (11) feet bgs had been excavated. Based on field screening data, and the limited space available on site, the soil was generally loaded directly on trucks for transportation and disposal. A total of 672 tons of petroleum-contaminated soil was removed from the Site and disposed of at Bio Industries in Red Bluff, California.

3.0 SITE INVESTIGATION

3.1 Investigation Objectives

Previous investigations have indicated that the identified groundwater contamination has migrated to offsite and to the southwest of the Site. To assess the groundwater contamination in this area, SounPacific propose the drilling of addition borings to the south of the Site for the purpose of collecting grab groundwater samples to assist in the delineation of the groundwater contamination. In addition, one offsite boring will be converted to a groundwater monitoring well and a monitoring well will be installed to replace monitoring well MW-5 that was destroyed during the recent excavation of the on-

site contaminated soil. The objectives of the proposed additional site investigation at the Site are as follows:

- Installation of five offsite borings (PB-31 through PB-34, and MW-8)) to assist in the vertical delineation of the identified offsite groundwater contamination.

- Installation of one groundwater monitoring well (MW-7) to replace monitoring well MW-5 that had been destroyed during the recent excavation of contaminated soil.

- Installation of an offsite monitoring well (MW-8) in one of the borings.

- Collect soil and groundwater samples to further delineate groundwater contamination at the site, and confirm there is no offsite soil contamination.

- Determine the nature and levels of any contamination by:
    - Sampling of soil using EPA Method 5035 and analysis using EPA Methods 8260 and 8015.
    - Analysis of groundwater using EPA Methods 8260 and 8015.

- Incorporation of the new monitoring wells into the current groundwater monitoring program.

- Preparation of a Report of Findings that documents the activities, findings, and results of the proposed investigation, and proposed recommendations for further activities.

3.2 Proposed Scope of Work

To meet the objectives outline in section 3.1, the following scope of work is proposed:

3.2.1 Subsurface Investigation

Previous offsite subsurface investigations have not identified any soil contamination at the Site, however, off-site groundwater contamination was present in the grab sample from one of the borings drilled at the apartment complex to the west of the Site and in all the borings drilled on Reasor Road, south of the Site. In an effort to delineate the extent of the offsite groundwater contamination, SounPacific proposed the drilling of additional offsite borings for the collection of additional soil and grab groundwater samples. In addition groundwater monitoring wells will be installed to assist in the contamination monitoring and groundwater flow characterization and to provide the ability to monitor any contaminant migration as well as their concentrations over time.

To evaluate and delineate the petroleum hydrocarbons in both areas, SounPacific proposes the drilling and sampling of four (4) additional Geoprobe® borings (PB-31 through PB-34), one (1) new on-site groundwater monitoring well to replace the former MW-5, and one (1) new off-site monitoring well on the southside of Reasor Road. The locations of the proposed borings are shown in Figure 5. All borings will be drilled with the use of a truck-mounted direct-push Geoprobe® drill-rig. Additional "step-out" borings may be installed contingent on field observations by the project scientist, communication with HCDEH, and ability to obtain the required access agreements and permits. The results retrieved from the planned borings will be used to delineate the extent of the groundwater contamination and further develop the conceptual model for the Site. SounPacific staff will oversee all facets of this investigative work.

The rational and objective for each of the borings and monitoring wells is presented below. However, it should be noted that the locations of the borings and wells are subject to change based upon the presence of underground utilities. The proposed locations for the borings and groundwater monitoring wells are shown in Figure 5.

Proposed Boring PB-31

Proposed boring PB-31 will be located on the public right-of-way adjacent to the private property at 1574 Reasor Road. This location is approximately 120 feet southwest of the

southwester corner of the McKinleyville 76 property. This boring will be positioned as the most westerly of the proposed borings and should define the western lateral extent of the groundwater plume. As this boring is located on a public right-of-way, an encroachment permit will be required, prior to conducting the field work.

Proposed Boring PB-32

This boring will be approximately 45 feet east-southeast from the proposed boring PB-31 and located on the grassy area of the Captain Zack restaurant facility. The purpose of this boring will be to monitor the downgradient migration of the contamination. This boring is located on private property and will require an access agreement with the property owner, prior to conducting the field work.

Proposed Boring PB-33

Boring PB-33 will be located on the public right-of-way adjacent to the eastside of the Captain Zack driveway on Reasor Road. This location is approximately 45 feet southeast of the southwest corner of the McKinleyville 76 property. This boring will be positioned as the most easterly of the proposed borings and should define the eastern lateral extent of the groundwater plume in this area. As with proposed boring PB-31, an encroachment permit will be required, prior to conducting the field work.

Proposed Boring PB-34

This boring will be approximately 40 feet southwest, in a downgradient direction, from the proposed boring PB-32, and located on the grassy area of the Capitan Zack restaurant facility. The purpose of this boring will be to monitor the downgradient migration of the contamination. This boring, as proposed boring B-32, is located on private property and will require an access agreement with the property owner, prior to conducting the field work.

Proposed Monitoring Well PMW-7

This well will be the replacement well for well MW-5 that was destroyed during the excavation and removal of contaminated soil in December 2004.

Proposed Monitoring Well PMW-8

This proposed monitoring well will be located on the public right-of-way on the south side of Reasor Road, in the vicinity of former boring B-12. The grab groundwater sample from B-12, collected in October 2000, had reported TPHg and MTBE at concentrations of 270 ppb and 400 ppb, respectively. This well will be downgradient of all the current wells, and will monitor the migration of the contamination and assist in the delineation of the groundwater contamination.

3.2.2 Direct-Push Drilling and Sampling Method

All borings will be drilled with a truck mounted hydraulic drill rig using continuous core direct-push drilling by a State-licensed (C-57) driller. Soil samples will be collected and retained at a minimum of every four (4) feet interval, where lithologic changes occur, where areas of obvious contamination are present, and in the capillary fringe above groundwater. Soil samples will be visually inspected in the field, described, and screened for organic vapors using an organic vapor analyzer (OVA). Soils samples that indicate OVA levels greater than 25 ppm from the field screening method will be submitted for laboratory analysis. Based upon observations of the field geologist, additional samples will be collected to clarify field screening results, historical results and for QA/QC purposes. Field screening will be conducted by half filling a sealable plastic bag with the soil sample, allowing any vapors to collect in the bags headspace, and after a minimum of 10 minutes inserting the OVA probe into the bag's headspace for the analysis. All OVA readings will be recorded on the boring log. Soil samples will be inspected and documented by the project geologist for lithologic description of soil condition and classification using Unified Soil Classification System guidelines.

Any soil samples retained for laboratory analysis will be labeled, stored in appropriate sample containers, placed in coolers with ice, and kept at temperatures at or below 4° C for transportation under chain-of-custody to a State certified laboratory for analysis. All

drilling and sample tailings will be contained in sealed D.O.T. 17E/17H 55-gallon drums and stored on site for disposal.

3.2.3 Soil Analytical Method

All samples that report a PID field screening value greater that 25 ppm will be submitted for laboratory analysis. If all soil samples collected in the vadose zone from a boring reported field screening values less than 25 ppm, one soil sample will be retained and submitted for laboratory analysis. All soil samples will be collected following the EPA guidelines for **SW 846 Method 5035** and with the selected samples being analyzed for TPHg, BTXE, and five-oxygenates by **EPA Method 8260B** and analyzed for TPHd and TPHmo by **EPA Method 8015**. All laboratory analysis will be conducted by a State certified laboratory on a normal turnaround basis.

3.2.4 Grab Groundwater Sampling Method

Grab groundwater samples will be collected from the four (4) proposed borings. These borings will be limited to a depth of approximately twelve (12) feet bgs. A temporary well point, consisting of a small diameter PVC screened well casing will be placed in the boring to facilitate the collection of the sample. No well development will be conducted; however, the depth to water will be measured and recorded prior to and after the collection of the sample. The groundwater sample will be collected using a pre-cleaned or one-time uses disposable bailer or similar appropriate equipment. The well point will be removed from the boring within 72 hours, after which it will be grouted in accordance to industry standards.

All collected groundwater samples for laboratory analysis will be labeled, stored in laboratory supplied appropriate sample containers, placed in coolers with ice, and kept at temperatures at or below 4° C for transportation under chain-of-custody to a State certified laboratory for analysis.

3.2.5 Monitoring Well Construction

It is proposed to install two new groundwater monitoring wells (MW-7 and MW-8). Following the completion of the lithology study, the borings will be opened up to allow the installation of two-inch diameter groundwater monitoring wells. Each monitoring well will be installed in an eight-inch diameter boring drilled using a truck-mounted drill-rig equipped with eight (8) inch, outside diameter hollow-stem augers. Based on historical data, the maximum well depth is not anticipated to exceed thirteen (13) feet bgs. However, actual well screen placement and total depth will be based on groundwater level measurements encountered in the field and historical data. Prior to installation of the wells, SounPacific will obtain a monitoring well construction permit from the HCDEH.

The monitoring wells will be constructed of two-inch diameter, clean, flush-threaded, two-inch diameter PVC well materials. The well screen itself will not exceed 10 feet in length and will consist of 0.02-inch machine cut slots. In each well, a filter pack of #2/12 or No. 3 sand will be placed in the annual space between the well casing and boring walls, and extend from the bottom of the boring to approximately 0.5 foot above the screened interval. Following placement of the sand filter pack, each well will be surged with a surge block in an effort to settle the sand pack. Once field observations indicate that the sand pack has settled, the filter pack will be sealed by a one-foot layer of hydrated bentonite. The remaining annular space will be filled with cement bentonite grout, and surface construction of the wells will be completed with a locking, waterproof, flush mount, traffic-rated cover or a locking steel monument. Proposed monitoring well construction details are shown in Figure 6. Some deviation to the well construction may occur based upon groundwater level measurements at the time of drilling.

Following the installation of the wells, a licensed surveyor will determine the elevation and location of each monitoring well at the site to a status datum point and according to Geotracker specifications as required by the NCRWQCB. All data will be entered into the Geotracker database using the new x, y, z coordinate system.

3.2.6 Monitoring Well Development and Groundwater Sampling

Approximately 72 hours after the installation of the wells, each well will be developed using a purge pump or similar. Well development will continue until all fines are removed and no turbidity is visually present. A minimum of ten (10) well volumes will be removed during the developing process, unless the well goes dry, at which time well development will cease. During development, the pH, conductivity, and temperature of the extracted water will be tested at regular intervals to verify that representative samples of formation groundwater are present in the well. Following well development, the wells will be allowed to recharge a minimum of 24 hours prior to sampling. The first sampling event (Well Installation Sampling Event) will be conducted at this time. Stabilized groundwater levels will be measured during this event. Three (3) well volumes of groundwater will be purged from wells, again testing pH, conductivity, temperature, and turbidity for signs of representative formation waters. Groundwater samples will be taken from the wells with disposable PVC bailers or a peristaltic pump, stored in appropriate containers (i.e. VOA vials), placed in coolers with ice, kept at or below four degrees Celsius, and transported to a State certified laboratory under chain-of-custody documentation for analysis. If the well(s) contain any free product, the thickness of the product will be measured in the field using an oil-water interface meter and no groundwater sample will be collected.

3.2.7 Groundwater Monitoring Program

Following the initial sampling of the new wells, they will be incorporated into the Site's ongoing groundwater monitoring program. The groundwater monitoring program will consist of gauging all wells and the collection of groundwater samples for laboratory analysis on a quarterly basis. Each monitoring event will consist of measuring the depth to groundwater and followed by the purging of the well of a minimum three (3) well volumes, after which the well will be sampled for analysis. During purging activities, the extracted well water will be tested for pH, conductivity, temperature, and clarity for signs of representative formation waters. Groundwater samples will be collected from the wells with disposable PVC bailers or a peristaltic pump, stored in appropriate containers

(i.e. VOA vials), placed in coolers with ice, kept at or below four degrees Celsius, and transported to a State of California certified laboratory under appropriate chain of custody documentation for analyses.

Groundwater monitoring will continue in all wells until no contaminants are reported in a well for four (4) consecutive monitoring events. At that time, laboratory analysis of that well will be reduced to an annual occurrence; however, quarterly groundwater elevation measurements will continue.

3.2.8 Groundwater Analytical Methods

Both the grab groundwater samples from the borings and groundwater samples from the monitoring wells will be collected following standard EPA protocols. All groundwater samples will be analyzed for TPHg, BTXE, and five-oxygenates by **EPA Method 8260B** and analyzed for TPHd and TPHmo by **EPA Method 8015**. All laboratory analysis will be conducted by a State certified laboratory on a normal turnaround basic.

3.2.9 Quality Control and Assurance Measures

Groundwater and soil sample quality control and assurance measures will include either a trip blank consisting of a sample container filled at the laboratory with distilled (blank) water, a field blank consisting of a clean sample container filled by SounPacific personnel under field conditions with distilled water, or a field duplicate groundwater sample obtained during each sampling event. The blank or field duplicate sample will be subjected to the same analyses as groundwater samples.

3.2.10 Site Sanitation Procedures

All drill cutting and groundwater extracted from wells and boreholes will be stored on site in D.O.T. 17E/17H 55-gallon drums. Laboratory analyses will be used to establish proper disposal procedures for cuttings and purge/development waters. Rinsate generated from steam cleaning drilling, development, and sampling equipment will be

contained in a portable washbasin and pumped into 55-gallon drums for storage before disposal.

4.0 PROPOSED TIME SCHEDULE

The schedule for the proposed subsurface investigation at McKinleyville 76 Site is as follows:

- Following approval of the *Workplan*, subcontractors will be contracted, the required permits and access agreements obtained, and the *Workplan* implementation scheduled. It is expected that the field work will be completed within four (4) weeks of receiving *Workplan* approval. It is expected that the field work will be completed within four (4) days.

- Within eight (8) weeks of completing the field work, a Report of Findings will be prepared and submitted to the HCDEH that includes formal tables, figures, boring logs, monitoring well installation data and recommendations for further activities, if deemed necessary.

Project implementation dates are subject to agency approval, permitting, and equipment scheduling. If there is a deviation from the proposed schedule, all concerned parties will be notified at least five days before the proposed initiation. A two to three-day drilling program is expected. Formal laboratory results are expected four weeks after submitting samples. The report of findings will encompass the field investigation, present findings, and recommendations regarding future activities at the site. In addition, all GeoTracker information will be submitted.

5.0 CERTIFICATION

This Workplan was prepared under the direct supervision of a California registered geologist at SounPacific. All information provided in this report including statements, conclusions and recommendations are based solely on field observations and analyses performed by a state-certified laboratory. SounPacific is not responsible for laboratory errors.

SounPacific promises to perform all its work in a manner used by members in similar professions working in the same geographic area. SounPacific will do whatever is reasonable to ensure that data collection is accurate. Please note however, that rain, buried utilities, and other factors can influence groundwater depths, directions, and other factors beyond what SounPacific could reasonably determine.

SounPacific

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Project Manager

Reviewed by:

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Tables

Table 1
Water Levels
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL
MW-1	6/25/2002	12.52	114.23	5.39	108.84
	7/25/2002	12.51	114.23	6.21	108.02
	8/14/2002	12.51	114.23	6.56	107.67
	9/16/2002	12.49	114.23	6.92	107.31
	10/21/2002	12.53	114.23	7.26	106.97
	11/21/2002	11.26	114.23	6.54	107.69
	12/21/2002	12.48	114.23	2.01	112.22
	1/22/2003	11.54	114.23	2.88	111.35
	2/26/2003	12.51	114.23	2.90	111.33
	3/28/2003	12.51	114.23	2.28	111.95
	4/28/2003	12.51	114.23	1.70	112.53
	5/28/2003	12.51	114.23	3.99	110.24
	6/27/2003	12.63	114.23	5.10	109.13
	9/25/2003	12.63	114.23	6.59	107.64
	12/29/2003	12.63	114.23	1.22	113.01
	3/30/2004	12.63	114.23	2.80	111.43
	6/28/2004	12.60	114.23	5.68	108.55
	9/30/2004	12.60	114.23	7.06	107.17
	12/20/2004	12.55	114.23	3.41	110.82
	4/5/2005	12.55	114.23	2.23	112.00
	6/22/2005	12.51	114.23	2.90	111.33
MW-2	6/25/2002	13.41	113.81	4.75	109.06
	7/25/2002	13.43	113.81	5.62	108.19
	8/14/2002	13.42	113.81	6.02	107.79
	9/16/2002	13.42	113.81	6.38	107.43
	10/21/2002	13.39	113.81	6.71	107.10
	11/21/2002	12.54	113.81	6.08	107.73
	12/21/2002	13.49	113.81	1.42	112.39
	1/22/2003	12.71	113.81	2.50	111.31
	2/26/2003	13.24	113.81	2.35	111.46
	3/28/2003	13.24	113.81	1.76	112.05
	4/28/2003	13.24	113.81	1.27	112.54
	5/28/2003	13.24	113.81	3.44	110.37
	6/27/2003	13.57	113.81	4.50	109.31
	9/25/2003	13.57	113.81	6.02	107.79
	12/29/2003	NT	113.81	NT	NT
	3/30/2004	13.57	113.81	2.09	111.72
	6/28/2004	13.37	113.81	5.06	108.75
	9/30/2004	13.20	113.81	6.49	107.32
	12/20/2004	13.15	113.81	2.61	111.20
	4/5/2005	12.97	113.81	1.64	112.17
	6/22/2005	13.05	113.81	2.25	111.56

Table 1 (cont.)
Water Levels
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL
MW-3	6/25/2002	11.28	114.78	5.81	108.97
	7/25/2002	13.22	114.78	7.64	107.14
	8/14/2002	13.24	114.78	7.48	107.30
	9/16/2002	13.26	114.78	7.39	107.39
	10/21/2002	11.24	114.78	7.76	107.02
	11/21/2002	13.31	114.78	5.45	109.33
	12/21/2002	11.18	114.78	2.33	112.45
	1/22/2003	13.52	114.78	1.95	112.83
	2/26/2003	11.31	114.78	3.27	111.51
	3/28/2003	11.31	114.78	2.59	112.19
	4/28/2003	11.31	114.78	2.05	112.73
	5/28/2003	11.31	114.78	4.42	110.36
	6/27/2003	11.33	114.78	5.51	109.27
	9/25/2003	11.33	114.78	7.03	107.75
	12/29/2003	11.33	114.78	1.50	113.28
	3/30/2004	11.33	114.78	3.18	111.60
	6/28/2004	11.30	114.78	6.09	108.69
	9/30/2004	11.25	114.78	7.55	107.23
	12/20/2004	11.26	114.78	3.56	111.22
	4/5/2005	11.21	114.78	2.54	112.24
	6/22/2005	11.21	114.78	3.22	111.56
MW-4	6/25/2002	12.34	115.18	6.31	108.87
	7/25/2002	12.32	115.18	7.10	108.08
	8/14/2002	12.32	115.18	7.52	107.66
	9/16/2002	12.31	115.18	7.85	107.33
	10/21/2002	12.31	115.18	8.21	106.97
	11/21/2002	12.32	115.18	7.05	108.13
	12/21/2002	12.22	115.18	2.69	112.49
	1/22/2003	12.57	115.18	3.27	111.91
	2/26/2003	12.29	115.18	3.71	111.47
	3/28/2003	12.29	115.18	3.02	112.16
	4/28/2003	12.29	115.18	2.41	112.77
	5/28/2003	12.29	115.18	4.88	110.30
	6/27/2003	12.38	115.18	5.99	109.19
	9/25/2003	12.38	115.18	7.50	107.68
	12/29/2003	12.38	115.18	1.78	113.40
	3/30/2004	12.38	115.18	3.60	111.58
	6/28/2004	12.33	115.18	6.59	108.59
	9/30/2004	12.25	115.18	8.00	107.18
	12/20/2004	12.23	115.18	4.24	110.94
	4/5/2005	12.20	115.18	2.95	112.23
	6/22/2005	12.20	115.18	3.70	111.48

Table 1 (cont.)
Water Levels
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL
MW-5	6/25/2002	12.42	114.47	5.48	108.99
	7/25/2002	12.39	114.47	6.35	108.12
	8/14/2002	12.39	114.47	7.12	107.35
	9/16/2002	12.40	114.47	7.12	107.35
	10/21/2002	12.41	114.47	7.49	106.98
	11/21/2002	12.43	114.47	6.36	108.11
	12/21/2002	12.36	114.47	2.11	112.36
	1/22/2003	12.41	114.47	2.59	111.88
	2/26/2003	12.45	114.47	3.00	111.47
	3/28/2003	12.45	114.47	2.36	112.11
	4/28/2003	12.45	114.47	1.84	112.63
	5/28/2003	12.45	114.47	4.11	110.36
	6/27/2003	12.57	114.47	5.21	109.26
	9/25/2003	12.57	114.47	6.71	107.76
MW-6	6/25/2002	12.31	114.70	5.86	108.84
	7/25/2002	12.26	114.70	6.65	108.05
	8/14/2002	12.27	114.70	6.97	107.73
	9/16/2002	12.27	114.70	7.40	107.30
	10/21/2002	12.26	114.70	7.74	106.96
	11/21/2002	12.23	114.70	6.58	108.12
	12/21/2002	12.16	114.70	2.39	112.31
	1/22/2003	12.44	114.70	2.87	111.83
	2/26/2003	12.21	114.70	3.29	111.41
	3/28/2003	12.21	114.70	2.68	112.02
	4/28/2003	12.21	114.70	2.07	112.63
	5/28/2003	12.21	114.70	4.45	110.25
	6/27/2003	12.36	114.70	5.56	109.14
	9/25/2003	12.36	114.70	7.05	107.65
	12/29/2003	12.36	114.70	1.54	113.16
	3/30/2004	12.36	114.70	3.22	111.48
	6/28/2004	12.27	114.70	6.13	108.57
	9/30/2004	12.23	114.70	7.54	107.16
	12/20/2004	12.21	114.70	3.86	110.84
	4/5/2005	12.19	114.70	2.62	112.08
	6/22/2005	12.20	114.70	3.33	111.37

Table 2
Soil Analytical Results
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)	Total Lead (ppm)	TOG (ppm)	Cr (ppm)	Zn (ppm)
McK-1	Waste Oil UST	12/12/1996	**5,600**	**7.3**	**15**	**550**	**78**	-----	-----	-----	-----	-----	ND < 10	**1,900**	**23**	**2,900**	**65**	**25**
B-1 @ 3.5'	B-1	3/25/1997	**36**	**0.018**	**0.18**	**1.32**	**0.21**	ND < 0.10	-----	-----	-----	-----	**1.7**	**14**	**2.8**	-----	-----	-----
B-2 @ 3.5'	B-2	3/25/1997	**1.7**	**0.021**	ND < 0.02	**.022**	**0.025**	ND < 0.05	-----	-----	-----	-----	ND < 10	**170**	**3.3**	-----	-----	-----
B-3 @ 3.5'	B-3	3/25/1997	**3**	**0.012**	ND < 0.03	ND < 1.0	ND < 0.05	ND < 0.05	-----	-----	-----	-----	ND < 10	**240**	**16**	-----	-----	-----
B-4 @ 3.5'	B-4	3/25/1997	**110**	**0.21**	ND < 0.50	**0.63**	**0.75**	ND < 0.25	-----	-----	-----	-----	**32**	**210**	**52**	-----	-----	-----
B-5 @ 3.5'	B-5	3/25/1997	**8,400**	**72**	**340**	**580**	**100**	ND < 50	-----	-----	-----	-----	**830**	**23**	**8.8**	-----	-----	-----
MW-1 @ 3.5'	MW-1	3/25/1997	ND < 1.0	**0.0072**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	**2.8**	-----	-----	-----
MW-2 @ 3.0'	MW-2	3/25/1997	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	**5.3**	-----	-----	-----
MW-3 @ 4.5'	MW-3	3/25/1997	**360**	**0.14**	ND < 0.005	**1.9**	**1.4**	ND < 0.05	-----	-----	-----	-----	**11**	**28**	**6.5**	-----	-----	-----
B-6 @ 5'	B-6	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-6 @ 10'	B-6	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-7 @ 5'	B-7	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	**7.3**	**19**	-----	-----	-----	-----
B-7 @ 10'	B-7	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-8 @ 5'	B-8	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-8 @ 10'	B-8	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-9 @ 5'	B-9	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-9 @ 10'	B-9	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	**0.24**	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-10 @ 5'	B-10	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-10 @ 10'	B-10	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-11 @ 5'	B-11	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----		-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-11 @ 11'	B-11	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-12 @ 5'	B-12	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-12 @ 10'	B-12	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-13 @ 5'	B-13	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-13 @ 10'	B-13	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-14 @ 5'	B-14	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
B-14 @ 10'	B-14	10/25/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	-----	-----	-----	-----	ND < 1.0	ND < 10	-----	-----	-----	-----
SB-18 @ 4'	B-18	6/17/2002	ND < 0.06	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 10	ND < 10	-----	-----	-----	-----
SB-18 @ 8'	B-18	6/17/2002	ND < 0.06	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 10	ND < 10	-----	-----	-----	-----
MW-4 @ 8'	MW-4	6/17/2002	ND < 0.06	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	ND < 10	**25.4**	-----	-----	-----	-----
MW-5 @ 4'	MW-5	6/17/2002	**150**	**1.47**	**11.3**	**15.3**	**4.7**	ND < 1	ND < 1	ND < 1	ND < 1	ND < 1000	**107**	ND < 10	-----	-----	-----	-----
MW-5 @ 8'	MW-5	6/17/2002	**59.3**	ND < 1	**5.12**	**9.92**	**1.89**	**7.61**	ND < 1	ND < 1	ND < 1	ND < 1000	**121**	ND < 10	-----	-----	-----	-----

Notes:
TPHg: Total petroleum hydrocarbons as gasoline.
MTBE: Methyl tertiary butyl ether
DIPE: Diisopropyl ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether
TBA: Tertiary butanol
TPHd: Total petroleum hydrocarbons as diesel.
TPHmo: Total petroleum hydrocarbons as motor oil.
TOG: Total oil & grease
Cr: Chromium
Zn: Zinc
ppm: parts per million = µg/g = mg/kg = 1000 µg/kg
ND: Not detected. Results were reported below the method detection limit as shown.

Table 2 (cont.)
Soil Analytical Results
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	Total Lead (ppm)
McK 76-2	Test Pit	10/6/2003	ND < 1.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	ND < 1.0	-----
TE-1NP	Ust Pit	12/11/2003	**70**	ND < 0.25	**0.39**	ND < 0.5	**0.66**	**0.66**	ND < 0.25	ND < 0.25	ND < 0.25	ND < 2.5	----	----
TE-2NM	Ust Pit	12/11/2003	**2,500**	ND < 2.5	**16**	**63.5**	**26**	ND < 2.5	ND < 2.5	ND < 2.5	ND < 2.5	ND < 25	----	**8.7**
TE-3NR	Ust Pit	12/11/2003	**6,900**	ND < 2.5	ND < 2.5	**41**	**35**	ND < 2.5	ND < 2.5	ND < 2.5	ND < 2.5	ND < 25	----	----
TE-4SR	Ust Pit	12/11/2003	**9,200**	**2.5**	**6.3**	**238**	**67**	ND < 2.5	ND < 2.5	ND < 2.5	ND < 2.5	ND < 25	----	----
TEPW-5	Ust Pit	12/12/2003	**4,400,000**	**800**	**120,000**	**3,170**	**780**	**3,200**	ND < 500	ND < 500	ND < 500	ND < 5,000	----	----
DI-1	Sidewall	12/22/2003	**3,500**	**40**	**410**	**680**	**110**	**31**	ND < 5.0	**15**	ND < 5.0	ND < 50	-----	**110**
DI-2	Sidewall	12/22/2003	**15,000**	**84**	**340**	**1,300**	**200**	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	-----	**14**
DI-3	Sidewall	12/22/2003	**490**	**1.5**	**1.7**	**3.3**	**2.0**	ND < 0.1	ND < 0.1	ND < 0.1	ND < 0.1	ND < 1.0	-----	**27**
DI-4	Sidewall	12/22/2003	**430**	**1.0**	**2.5**	**4.0**	**7.8**	**0.25**	ND < 0.25	ND < 0.25	ND < 0.25	ND < 2.5	-----	**16**
DI-5	Sidewall	12/22/2003	**2,700**	**20**	**96**	**270**	**55**	**2.6**	ND < 2.5	ND < 2.5	ND < 2.5	ND < 25	-----	**6.7**
SB-19 @ 4'	B-19	9/23/2004	**1.9**	**0.15**	**0.011**	**0.039**	**0.039**	**0.51**	ND < 0.006	ND < 0.006	ND < 0.006	**0.14**	----	----
SB-19 @ 8'	B-19	9/23/2004	ND < 70	**3.6**	**3.7**	**2.41**	ND < 0.70	**6.2**	ND < 0.70	ND < 0.70	ND < 0.70	ND < 7.0	----	----
SB-19 @ 10'	B-19	9/23/2004	**2.4**	**0.20**	**0.047**	**0.071**	**0.041**	**1.6**	ND < 0.005	**0.16**	ND < 0.005	**0.94**	----	----
SB-20 @ 4'	B-20	9/22/2004	**1,800**	**15**	**86**	**154**	**33**	**6.6**	ND < 0.59	ND < 0.59	ND < 0.59	ND < 5.9	----	----
SB-20 @ 8'	B-20	9/22/2004	**5.3**	**0.11**	**0.19**	**0.58**	**0.14**	**0.12**	ND < 0.006	ND < 0.006	ND < 0.006	ND < 0.06	----	----
SB-20 @ 10'	B-20	9/22/2004	**5.9**	**0.046**	**0.19**	**0.45**	**0.11**	**0.051**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	----	----
SB-21 @ 4'	B-21	9/22/2004	**3,600**	**25**	**210**	**348**	**72**	**2.5**	ND < 0.58	ND < 0.58	ND < 0.58	ND < 5.8	----	----
SB-21 @ 8'	B-21	9/22/2004	**800**	**0.71**	**5.2**	**74**	**21**	ND < 0.51	ND < 0.51	ND < 0.51	ND < 0.51	ND < 5.1	----	----
SB-21 @ 10'	B-21	9/22/2004	**2.6**	**0.042**	**0.12**	**0.312**	**0.11**	**0.11**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	----	----
SB-22 @ 4'	B-22	9/22/2004	**570**	ND < 0.60	**1.7**	**49.4**	**11**	ND < 0.60	ND < 0.60	ND < 0.60	ND < 0.60	ND < 6.0	----	----
SB-22 @ 8'	B-22	9/22/2004	**32**	ND < 0.005	**0.044**	**1.80**	**0.41**	**0.007**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	----	----
SB-22 @ 10'	B-22	9/22/2004	**2.2**	ND < 0.006	**0.008**	**0.194**	**0.045**	**0.009**	ND < 0.006	ND < 0.006	ND < 0.006	ND < 0.06	----	----

Notes:
TPHg: Total petroleum hydrocarbons as gasoline.
MTBE: Methyl tertiary butyl ether
DIPE: Diisopropyl ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether
TBA: Tertiary butanol
TPHd: Total petroleum hydrocarbons as diesel.
TPHmo: Total petroleum hydrocarbons as motor oil.
ppm: parts per million = µg/g = mg/kg = 1000 µg/kg
ND: Not detected. Results were reported below the method detection limit as shown.

Table 2 (cont.)
Soil Analytical Results
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)
SB-23 @ 4'	B-23	9/22/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	**0.006**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-23 @ 8'	B-23	9/22/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-23 @ 10'	B-23	9/22/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-24 @ 4'	B-24	9/22/2004	**1.3**	**0.015**	ND < 0.005	ND < 0.015	**0.005**	**0.084**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-24 @ 8'	B-24	9/22/2004	ND < 1.0	ND < 0.006	ND < 0.006	ND < 0.018	ND < 0.006	ND < 0.006	ND < 0.006	ND < 0.006	ND < 0.006	ND < 0.06
SB-24 @ 10'	B-24	9/22/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-25 @ 4'	B-25	9/23/2004	ND < 1.0	**0.009**	ND < 0.006	ND < 0.018	ND < 0.006	**0.17**	ND < 0.006	ND < 0.006	ND < 0.006	ND < 0.06
SB-25 @ 8'	B-25	9/23/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	**0.014**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-25 @ 10'	B-25	9/23/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-26 @ 4'	B-26	9/23/2004	**1,700**	**1.1**	**2.7**	**77**	**19**	ND < 0.61	ND < 0.61	ND < 0.61	ND < 0.61	ND < 6.1
SB-26 @ 8'	B-26	9/23/2004	**5.1**	**0.041**	**0.010**	**0.294**	**0.13**	**0.028**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-26 @ 10'	B-26	9/23/2004	ND < 1.0	ND < 0.005	ND < 0.005	**0.031**	**0.009**	**0.061**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-27 @ 4'	B-27	9/23/2004	**1,700**	ND < 0.63	ND < 0.63	**33.4**	**14**	ND < 0.63	ND < 0.63	ND < 0.63	ND < 0.63	ND < 6.3
SB-27 @ 8'	B-27	9/23/2004	ND < 1.0	ND < 0.005	ND < 0.005	**0.016**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-27 @ 10'	B-27	9/23/2004	**1.6**	ND < 0.005	ND < 0.005	**0.097**	**0.019**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-28 @ 4'	B-28	9/23/2004	**80**	ND < 0.14	ND < 0.14	ND < 0.41	ND < 0.14	ND < 0.14	ND < 0.14	ND < 0.14	ND < 0.14	ND < 1.4
SB-28 @ 8'	B-28	9/23/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-28 @ 10'	B-28	9/23/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-29 @ 4'	B-29	9/27/2004	**290**	ND < 0.60	ND < 0.60	**5.5**	**2.6**	ND < 0.60	ND < 0.60	ND < 0.60	ND < 0.60	ND < 6.0
SB-29 @ 8'	B-29	9/27/2004	**1.6**	**0.007**	ND < 0.005	**0.047**	**0.026**	**0.028**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-29 @ 10'	B-29	9/27/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	**0.025**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-30 @ 4'	B-30	9/27/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-30 @ 8'	B-30	9/27/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05
SB-30 @ 10'	B-30	9/27/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05

Notes:
TPHg: Total petroleum hydrocarbons as gasoline.
MTBE: Methyl tertiary butyl ether
DIPE: Diisopropyl ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether
TBA: Tertiary butanol
ppm: parts per million = µg/g = mg/kg = 1000 µg/kg
ND: Not detected. Results were reported below the method detection limit as shown.

Table 3
Groundwater Analytical Results
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample ID	Sample Location	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	TPHd (ppb)	TPHmo (ppb)	TOG (ppb)	Total Lead (ppb)	Cr (ppb)	Zn (ppb)
McK-2	Waste Oil UST	12/12/1996	**32,000**	**2,400**	**270**	**5,000,000**	**2,400**	----	----	----	----	----	ND < 10	**31,000**	**0.064**	**500**	**150**	**160**
B-6	B-6	10/25/2000	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 3.0	----	----	----	----	ND < 50	ND < 170	----	----	----	----
B-7	B-7	10/25/2000	ND < 50	**0.52**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 3.0	----	----	----	----	ND < 50	ND < 170	----	----	----	----
B-8	B-8	10/25/2000	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 3.0	----	----	----	----	ND < 50	ND < 170	----	----	----	----
B-9	B-9	10/25/2000	**4,000**	**180**	ND < 3.0	ND < 2.0	ND < 2.0	**3,200**	----	----	----	----	**52**	ND < 170	----	----	----	----
B-10	B-10	10/25/2000	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 3.0	----	----	----	----	ND < 50	ND < 170	----	----	----	----
B-11	B-11	10/25/2000	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	**9.4**	----	----	----	----	ND < 50	ND < 170	----	----	----	----
B-12	B-12	10/25/2000	**270**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	**400**	----	----	----	----	ND < 50	ND < 170	----	----	----	----
B-13	B-13	10/25/2000	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	**11**	----	----	----	----	ND < 50	ND < 170	----	----	----	----
B-14	B-14	10/25/2000	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 3.0	----	----	----	----	ND < 50	ND < 170	----	----	----	----
B-15	B-15	4/24/2002	ND < 50	ND < 0.3	**6.4**	ND < 0.6	ND < 0.3	ND < 2	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	ND < 50	ND < 50	----	----	----	----
B-16	B-16	4/24/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	ND < 2	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	ND < 50	ND < 50	----	----	----	----
B-17	B-17	4/24/2002	**70**	ND < 0.3	**4.6**	ND < 0.6	ND < 0.3	**39.4**	ND < 0.5	**18.1**	ND < 0.5	ND < 100	ND < 50	ND < 50	----	----	----	----
SBGW-18 @ 6.1'	B-18	6/17/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	**9.9**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	ND < 50	ND < 50	----	----	----	----
McK 76-1	Test pit	10/6/2003	**29,000**	----	----	----	----	----	----	----	----	----	**2,200**	----	----	----	----	----
MCK 76 WT17	Water Tank	10/29/2003	**160**	**1.3**	ND < 0.5	**3.7**	**2.2**	**270**	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 50	----	----	----	----	----
PIT H2O	Excavated Pit	12/3/2004	**15,000,000**	**61,000**	**1,500,000**	**2,060,000**	**330,000**	**1,900,000**	ND < 10,000	**48,000**	ND < 10,000	ND < 100,000	**25,000**	**3,100**	----	----	----	----

Notes:
TPHg: Total petroleum hydrocarbons as gasoline.
MTBE: Methyl tertiary butyl ether
DIPE: Diisopropyl ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether
TBA: Tertiary butanol
TPHd: Total petroleum hydrocarbons as diesel.
TPHmo: Total petroleum hydrocarbons as motor oil.
TOG: Total oil & grease
Cr: Chromium
Zn: Zinc
ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.
ND: Not detected. Results were reported below the method detection limit as shown.

Table 4
Monitoring Well Groundwater Analytical Results
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample Location	Sample Event	Annual Quarter	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	Methanol (ppb)	Ethanol (ppb)	TPHd (ppb)	TPHmo (ppb)
MW-1	Well Installation	Second Quarter	6/25/2002	23,000	230	ND < 0.3	1.4	0.7	45,400	ND < 0.5	58	ND < 0.5	ND < 100	----	----	676	600
	First Quarterly	Third Quarter	9/16/2002	30,600	89.4	ND < 0.3	1.3	1.3	130,000	ND < 0.5	43.4	ND < 0.5	ND < 100	----	----	722	ND < 50
	Second Quarterly	Fourth Quarter	12/21/2002	ND < 50	ND < 50	ND < 50	ND < 100	ND < 50	7,600	ND < 50	ND < 50	ND < 50	ND < 500	----	----	ND < 50	ND < 500
	Third Quarterly	First Quarter	3/28/2003	4,200	1,200	ND < 50	ND < 100	ND < 50	33,000	ND < 50	ND < 50	ND < 50	ND < 500	ND < 5.0	ND < 1,300	440	ND < 500
	Fourth Quarterly	Second Quarter	6/27/2003	37,000	4,000	ND < 500	ND < 1,000	ND < 500	81,000	ND < 500	ND < 500	ND < 500	ND < 5,000	ND < 5.0	ND < 13,000	120	ND < 500
	Fifth Quarterly	Third Quarter	9/25/2003	ND < 40,000	23,000	ND < 500	ND < 1,000	ND < 500	72,000	ND < 500	ND < 500	ND < 500	ND < 5,000	ND < 5.0	ND < 20,000	900	ND < 500
	Sixth Quarterly	Fourth Quarter	12/29/2003	2,800	ND < 500	ND < 500	ND < 1,000	ND < 500	31,000	ND < 500	ND < 500	ND < 500	ND < 5,000	ND < 5.0	ND < 20,000	120	ND < 500
	Seventh Quarterly	First Quarter	3/30/2004	29,000	ND < 50	ND < 50	ND < 100	ND < 50	65,000	ND < 50	150	ND < 50	23,000	----	----	750	ND < 500
	Eighth Quarterly	Second Quarter	6/28/2004	44,000	2,100	ND < 50	ND < 100	ND < 50	100,000	ND < 50	130	ND < 50	ND < 500	----	----	870	ND < 500
	Ninth Quarterly	Third Quarter	9/30/2004	24,000	670	ND < 50	ND < 150	ND < 50	50,000	ND < 50	61	ND < 50	ND < 500	----	----	370	ND < 500
	Tenth Quarterly	Fourth Quarter	12/20/2004	ND < 2,000	ND < 20.0	ND < 20.0	ND < 40.0	ND < 20.0	2,080	ND < 20.0	ND < 200	ND < 200	ND < 2,000	----	----	103	122
	Eleventh Quarterly	First Quarter	4/5/2005	6,810	ND < 12.5	ND < 12.5	ND < 25.0	ND < 12.5	8,110	ND < 12.5	31.8	ND < 12.5	ND < 1,250	----	----	74	106
	Twelveth Quarterly	Second Quarter	6/22/2005	11,000	ND < 50	ND < 50	ND < 100	ND < 50	15,700	ND < 50	ND < 50	ND < 50	ND < 5,000	----	----	159	189
MW-2	Well Installation	Second Quarter	6/25/2002	4,650	255	108	1,010	289	108	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	----	----	883	596
	First Quarterly	Third Quarter	9/16/2002	886	91.4	23.5	162	15.4	17.1	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	----	----	382	ND < 50
	Second Quarterly	Fourth Quarter	12/21/2002	220	12	3.6	11.3	0.6	ND < 0.5	ND < 50	ND < 0.5	ND < 0.5	ND < 5.0	----	----	85	ND < 500
	Third Quarterly	First Quarter	3/28/2003	92	12	1.1	1.2	ND < 0.5	4.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 13	ND < 50	ND < 500
	Fourth Quarterly	Second Quarter	6/27/2003	1,700	190	36	189.7	100	16	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 13	330	ND < 500
	Fifth Quarterly	Third Quarter	9/25/2003	850	46	ND < 5.0	12	ND < 5.0	10	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 5.0	ND < 200	320	ND < 500
	Sixth Quarterly	Fourth Quarter	12/29/2003	----	----	----	----	----	----	----	----	----	----	----	----	----	----
	Seventh Quarterly	First Quarter	3/30/2004	140	14	0.5	0.8	ND < 0.5	12	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	----	----	110	ND < 500
	Eighth Quarterly	Second Quarter	6/28/2004	2,900	100	22	252	52	71	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	----	----	750	ND < 500
	Ninth Quarterly	Third Quarter	9/30/2004	790	29	ND < 5.0	25	ND < 5.0	26	ND < 5	ND < 5	ND < 5	ND < 50	----	----	170	ND < 500
	Tenth Quarterly	Fourth Quarter	12/20/2004	2,990	91.4	89.1	394	178	615	ND < 4.0	ND < 40.0	ND < 40.0	ND < 400	----	----	642	ND < 50
	Eleventh Quarterly	First Quarter	4/5/2005	337	7.7	ND < 0.5	ND < 1.0	ND < 0.5	27.6	ND < 0.5	1.2	ND < 0.5	ND < 50	----	----	ND < 50	55
	Twelveth Quarterly	Second Quarter	6/22/2005	518	32.8	0.8	1.7	ND < 0.5	129	ND < 0.5	5.3	ND < 0.5	ND < 50	----	----	85	ND < 50
MW-3	Well Installation	Second Quarter	6/25/2002	11,600	1,530	84.6	126	520	7,320	ND < 0.5	720	ND < 0.5	ND < 100	----	----	2,420	597
	First Quarterly	Third Quarter	9/16/2002	9,210	1,140	93.4	77	405	5,160	ND < 0.5	578	ND < 0.5	ND < 100	----	----	3500	ND < 50
	Second Quarterly	Fourth Quarter	12/21/2002	24,000	1,200	180	1,337	960	12,000	ND < 50	750	ND < 50	ND < 500	----	----	1300	ND < 500
	Third Quarterly	First Quarter	3/28/2003	7,800	860	ND < 50	ND < 100	88	6,100	ND < 50	410	ND < 50	ND < 500	ND < 5.0	ND < 1,300	4,000	ND < 500
	Fourth Quarterly	Second Quarter	6/27/2003	12,000	750	ND < 50	ND < 100	190	3,100	ND < 50	190	ND < 50	ND < 500	ND < 5.0	ND < 1,300	5,100	ND < 500
	Fifth Quarterly	Third Quarter	9/25/2003	17,000	1,200	79	54	330	2,100	ND < 50	280	ND < 50	ND < 500	ND < 5.0	ND < 2,000	7,200	ND < 500
	Sixth Quarterly	Fourth Quarter	12/29/2003	17,000	1,700	120	170	1,200	6,000	ND < 50	540	ND < 50	2,700	ND < 5.0	ND < 2,000	ND < 50	ND < 500
	Seventh Quarterly	First Quarter	3/30/2004	15,000	810	43	34	300	1,600	ND < 5.0	200	ND < 5.0	1,500	----	----	7,300	ND < 500
	Eighth Quarterly	Second Quarter	6/28/2004	14,000	720	72	64	370	600	ND < 50	90	ND < 50	ND < 500	----	----	7,000	ND < 500
	Ninth Quarterly	Third Quarter	9/30/2004	9,300	660	62	37	190	790	ND < 0.5	69	ND < 0.5	600	----	----	3,000	ND < 500
	Tenth Quarterly	Fourth Quarter	12/20/2004	7,980	528	64.8	82.8	628	1,280	ND < 10.0	124	ND < 100	ND < 1,000	----	----	5,910	250
	Eleventh Quarterly	First Quarter	4/5/2005	8,190	347	31.8	21.4	201	1,440	ND < 10.0	116	ND < 10	ND < 1,000	----	----	5,860	ND < 150
	Twelveth Quarterly	Second Quarter	6/22/2005	4,800	280	25.1	15.6	142	489	ND < 2.5	48.7	ND < 2.5	301	----	----	5,700	336

Notes:
TPHg: Total petroleum hydrocarbons as gasoline.
MTBE: Methyl tertiary butyl ether
DIPE: Diisopropyl Ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether
TBA: Tertiary butanol
TPHd: Total petroleum hydrocarbons as diesel
TPHmo: Total petroleum hydrocarbons as motor oil
ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.
ND: Not detected at or below the method detection limit as shown.

Table 4 (cont.)
Monitoring Well Groundwater Analytical Results
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample Location	Sample Event	Annual Quarter	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	Methanol (ppb)	Ethanol (ppb)	TPHd (ppb)	TPHmo (ppb)
MW-4	Well Installation	Second Quarter	6/25/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	**3.9**	ND < 0.5	**5.6**	ND < 0.5	ND < 100	----	----	**199**	ND < 50
	First Quarterly	Third Quarter	9/16/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	ND < 2	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	----	----	ND < 50	ND < 50
	Second Quarterly	Fourth Quarter	12/21/2002	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	**4.8**	ND < 50	**3.8**	ND < 0.5	ND < 5.0	----	----	ND < 50	ND < 500
	Third Quarterly	First Quarter	3/28/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	**2.8**	ND < 0.5	**3.9**	ND < 0.5	ND < 5.0	ND < 5.0	ND < 0.5	ND < 50	ND < 500
	Fourth Quarterly	Second Quarter	6/27/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	**0.7**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 13	ND < 50	ND < 500
	Fifth Quarterly	Third Quarter	9/25/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 20	ND < 50	ND < 500
	Sixth Quarterly	Fourth Quarter	12/29/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 500
	Seventh Quarterly	First Quarter	3/30/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	----	----	**97**	ND < 500
	Eighth Quarterly	Second Quarter	6/28/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	----	----	ND < 50	ND < 500
	Ninth Quarterly	Third Quarter	9/30/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	----	----	**67**	ND < 500
	Tenth Quarterly	Fourth Quarter	12/20/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 5.0	ND < 5.0	ND < 50.0	----	----	ND < 50	**52**
	Eleventh Quarterly	First Quarter	4/5/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50.0	----	----	ND < 50	**86**
	Twelveth Quarterly	Second Quarter	6/22/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50.0	----	----	ND < 50	**85**
MW-5	Well Installation	Second Quarter	6/25/2002	**168,000**	**21,300**	**22,500**	**13,900**	**2,580**	**571,000**	ND < 0.5	**689**	ND < 0.5	ND < 100	----	----	**2,580**	ND < 50
	First Quarterly	Third Quarter	9/16/2002	**246,000**	**36,900**	**37,000**	**14,100**	**4,500**	**540,000**	ND < 0.5	**2,530**	ND < 0.5	----	----	----	**10,200**	ND < 50
	Second Quarterly	Fourth Quarter	12/21/2002	**11,000**	**120**	**110**	**650**	**120**	**1,100**	ND < 50	ND < 50	ND < 50	ND < 500	----	----	**930**	ND < 500
	Third Quarterly	First Quarter	3/28/2003	**43,000**	**2,900**	**2,600**	**2,500**	**580**	**78,000**	ND < 50	**180**	ND < 50	ND < 500	ND < 5.0	ND < 1,300	**4,600**	ND < 500
	Fourth Quarterly	Second Quarter	6/27/2003	**230,000**	**25,000**	**27,000**	**13,300**	**2,700**	**280,000**	ND < 500	**1,500**	ND < 500	ND < 5,000	ND < 5.0	ND < 13,000	**9,600**	ND < 500
	Fifth Quarterly	Third Quarter	9/25/2003	**210,000**	**24,000**	**24,000**	**11,400**	**2,400**	**320,000**	ND < 500	**2,500**	ND < 500	ND < 5,000	ND < 5.0	ND < 20,000	ND < 50	ND < 500
MW-6	Well Installation	Second Quarter	6/25/2002	**11,900**	**2,370**	**0.8**	**5.4**	**0.8**	**22,600**	ND < 0.5	**274**	ND < 0.5	ND < 100	----	----	**295**	ND < 50
	First Quarterly	Third Quarter	9/16/2002	**44,700**	**11,500**	**1,470**	**357**	**802**	**61,600**	ND < 0.5	**715**	ND < 0.5	ND < 100	----	----	**729**	ND < 50
	Second Quarterly	Fourth Quarter	12/21/2002	**17,000**	**5,500**	ND < 500	ND < 1,000	ND < 500	**67,000**	ND < 500	ND < 500	ND < 500	ND < 5,000	----	----	**440**	ND < 500
	Third Quarterly	First Quarter	3/28/2003	**270**	ND < 500	ND < 500	ND < 1,000	ND < 500	**1,200**	ND < 500	ND < 500	ND < 500	ND < 5,000	----	----	----	ND < 500
	Fourth Quarterly	Second Quarter	6/27/2003	ND < 50	**5.4**	**0.6**	ND < 1	ND < 0.5	**80**	ND < 0.5	**11**	ND < 0.5	ND < 5.0	ND < 5.0	ND < 13	ND < 50	ND < 500
	Fifth Quarterly	Third Quarter	9/25/2003	**11,000**	**1,500**	ND < 0.5	**2.4**	ND < 0.5	**17,000**	ND < 50	**280**	ND < 50	**1,200**	ND < 5.0	ND < 200	**73**	ND < 500
	Sixth Quarterly	Fourth Quarter	12/29/2003	**5,100**	**1,200**	ND < 500	ND < 1,000	ND < 500	**29,000**	ND < 500	ND < 500	ND < 500	ND < 5,000	ND < 5.0	ND < 20,000	ND < 50	ND < 500
	Seventh Quarterly	First Quarter	3/30/2004	**1,600**	**100**	ND < 5.0	ND < 10.0	ND < 5.0	**1,500**	ND < 5.0	**36**	ND < 5.0	**440**	----	----	**120**	ND < 500
	Eighth Quarterly	Second Quarter	6/28/2004	**5,700**	**460**	ND < 50	ND < 100	ND < 50	**6,000**	ND < 50	**230**	ND < 50	ND < 500	----	----	**82**	ND < 500
	Ninth Quarterly	Third Quarter	9/30/2004	**37,000**	**4,400**	ND < 50	ND < 150	ND < 50	**59,000**	ND < 50	**370**	ND < 50	**4,600**	----	----	**450**	ND < 500
	Tenth Quarterly	Fourth Quarter	12/20/2004	**50,500**	**4,210**	ND < 400	ND < 800	ND < 400	**58,100**	ND < 400	ND < 4,000	ND < 4,000	ND < 40,000	----	----	**488**	**114**
	Eleventh Quarterly	First Quarter	4/5/2005	**12,200**	**842**	ND < 40	ND < 80	ND < 40	**10,000**	ND < 40	**123**	ND < 40	ND < 4,000	----	----	**238**	**208**
	Twelveth Quarterly	Second Quarter	6/22/2005	**4,250**	**914**	ND < 10	ND < 20	ND < 10	**3,460**	ND < 10	**119**	ND < 10	ND < 1,000	----	----	**100**	**110**

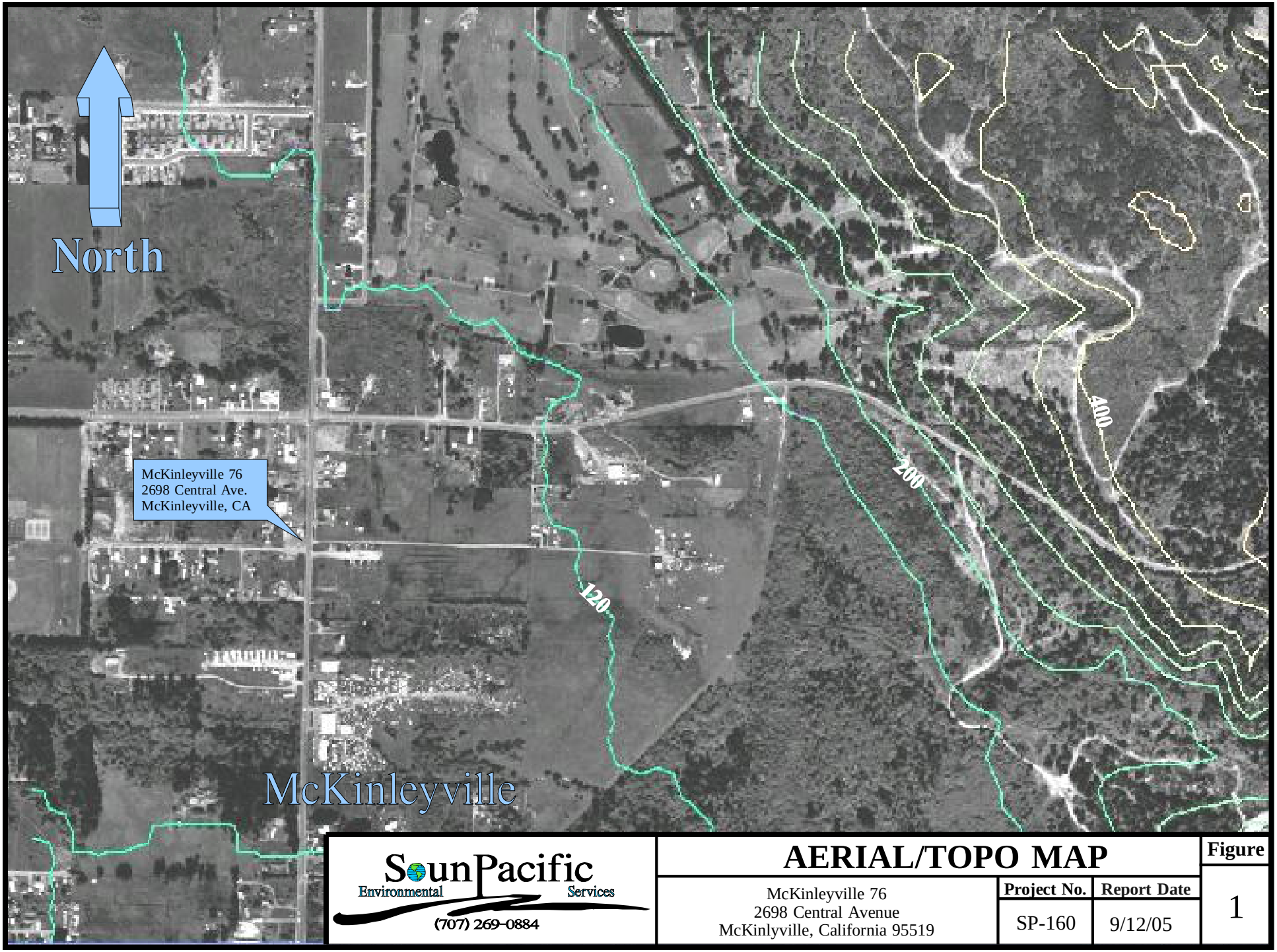
Notes:
TPHg: Total petroleum hydrocarbons as gasoline.
MTBE: Methyl tertiary butyl ethe
DIPE: Diisopropyl Ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether
TBA: Tertiary butanol
TPHd: Total petroleum hydrocarbons as diesel
TPHmo: Total petroleum hydrocarbons as motor oil
ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.
ND: Not detected at or below the method detection limit as shown.

Table 2 (cont.)
Soil Analytical Results
McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)
15T @ 4'	15T	12/1/2004	**5,280**	ND < 20	**264**	**299**	**53.4**	ND < 20	ND < 20	ND < 20	ND < 20	ND < 200	**316**	**30**
16T @ 4'	16T	12/1/2004	**3,790**	ND < 20	**248**	**152**	**26.9**	ND < 20	ND < 20	ND < 20	ND < 20	ND < 200	**198**	**34**
17T @ 4'	17T	12/1/2004	**4,270**	ND < 20	**162**	**334**	**60.1**	ND < 20	ND < 20	ND < 20	ND < 20	ND < 200	**241**	**36**
18T @ 4'	18T	12/1/2004	**842**	ND < 2.5	**36.8**	**135**	**26.6**	**12**	ND < 2.5	ND < 2.5	ND < 2.5	ND < 25	**128**	ND < 20
1B @ 8'	1B	12/2/2004	**5,100**	**20.1**	**231**	**452**	**84.6**	**22.6**	ND < 20	ND < 20	ND < 20	ND < 200	**357**	ND < 40
2B @ 8'	2B	12/2/2004	**3,140**	ND < 12.5	**119**	**291**	**52.6**	**15.2**	ND < 12.5	ND < 12.5	ND < 12.5	ND < 125	**164**	**22**
3B @ 8'	3B	12/2/2004	**0.106**	ND < 0.005	**0.021**	ND < 0.015	ND < 0.005	**0.006**	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	ND < 15	ND < 15
4B @ 8'	4B	12/2/2004	**21.4**	**1.14**	**2.04**	ND < 1.5	ND < 0.5	**2.07**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 10	ND < 10
5B @ 11'	5B	12/3/2004	**246**	ND < 0.8	**4.26**	**17.9**	**3.05**	ND < 0.8	ND < 0.8	ND < 0.8	ND < 0.8	ND < 8.0	**42**	ND < 20
6B @ 11'	6B	12/3/2004	ND < 0.06	ND < 0.005	**0.014**	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	ND < 10	ND < 10
7SW @ 5'	7SW	12/2/2004	**4,430**	**56.8**	**355**	**618**	**119**	**75.2**	ND < 25	ND < 25	ND < 25	ND < 250	**393**	ND < 40
Mck76SW8 @ 7'	8SW	12/3/2004	ND < 1.0	**0.055**	**0.013**	**0.016**	**0.012**	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	**1.2**	ND < 10
9SW @ 5'	9SW	12/2/2004	**1,400**	ND < 5	ND < 5	**66.2**	**18.2**	ND < 5	ND < 5	ND < 5	ND < 5	ND < 50	**31**	ND < 20
10SW @ 5'	10SW	12/3/2004	**4.17**	ND < 0.025	ND < 0.025	ND < 0.075	ND < 0.025	ND < 0.025	ND < 0.025	ND < 0.025	ND < 0.025	ND < 0.25	ND < 10	**13**
11SW @ 8'	11SW	12/3/2004	ND < 0.06	ND < 0.005	**14.8**	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	ND < 10	ND < 10
Mck76SW12 @ 8'	12SW	12/3/2004	ND < 1.0	ND < 0.005	**0.02**	**0.086**	**0.024**	ND < 0.025	ND < 0.020	ND < 0.020	ND < 0.020	ND < 0.50	**1.3**	ND < 10
13SW @ 7'	13SW	12/3/2004	**1,860**	ND < 6.66	**21.1**	**121**	**22.4**	ND < 6.66	ND < 6.66	ND < 6.66	ND < 6.66	ND < 66.6	**61**	ND < 20
14SW @ 5'	14SW	12/3/2004	**6,170**	**156**	**1,380**	ND < 150	ND < 50	**93.6**	ND < 50	ND < 50	ND < 50	ND < 500	**1,750**	ND < 200

Notes:
TPHg: Total petroleum hydrocarbons as gasoline.
MTBE: Methyl tertiary butyl ether
DIPE: Diisopropyl ether
TAME: Tertiary amyl methyl ether
ETBE: Ethyl tertiary butyl ether
TBA: Tertiary butanol
TPHd: Total petroleum hydrocarbons as diesel.
TPHmo: Total petroleum hydrocarbons as motor oil.
ppm: parts per million = µg/g = mg/kg = 1000 µg/kg
ND: Not detected. Results were reported below the method detection limit as shown.

Figures

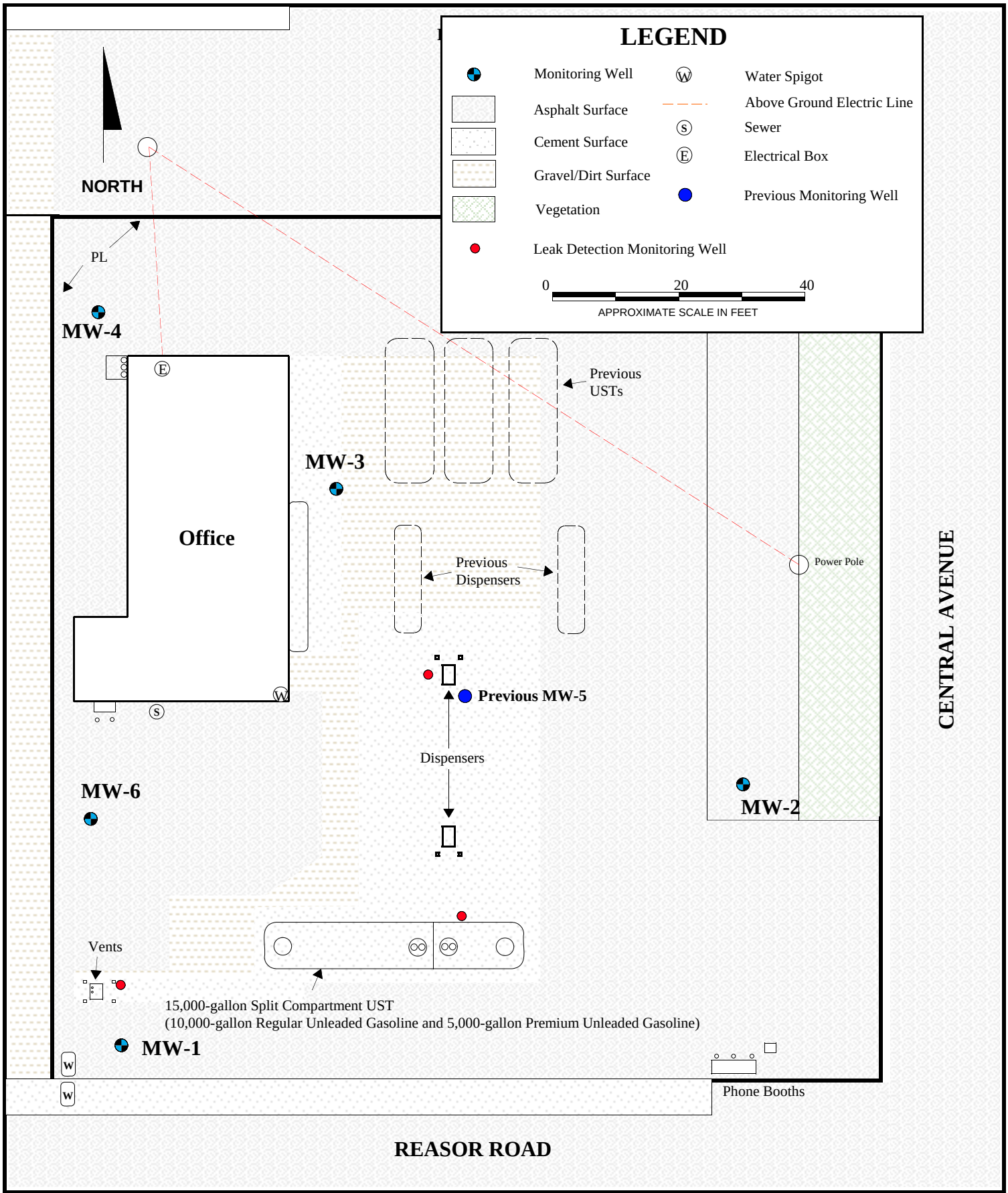


SunPacific Environmental Services
(707) 269-0884

AERIAL/TOPO MAP

McKinleyville 76
2698 Central Avenue
McKinlyville, California 95519

Project No.	Report Date	Figure
SP-160	9/12/05	1



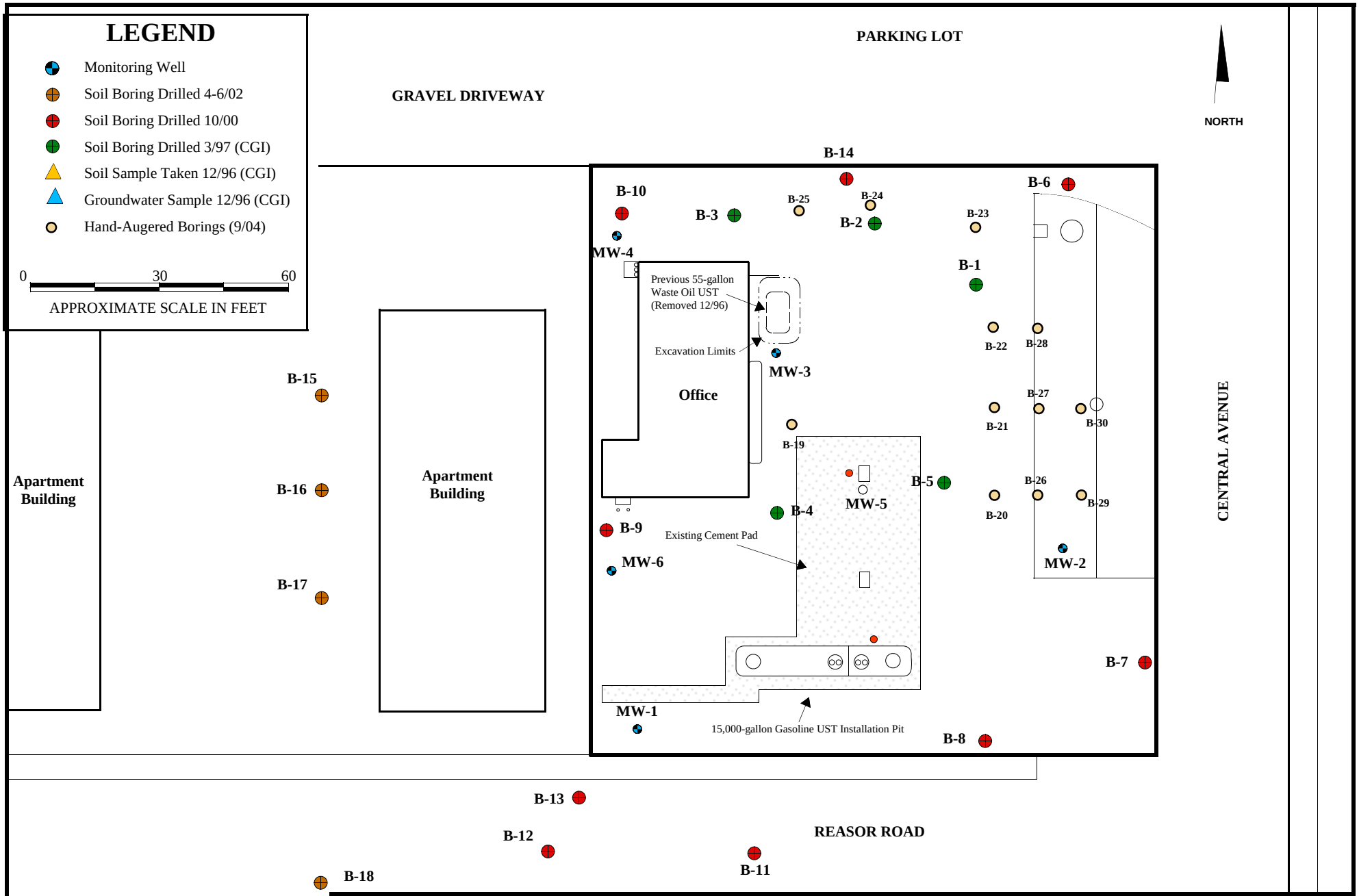
SITE PLAN

Figure 2

Environmental Services

McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Project No.	Report Date
SP-160	9/12/05



Environmental Services

PREVIOUS INVESTIGATIONS

McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Project No.	Report Date
SP-160	9/12/05

Figure 3

LEGEND

- Monitoring Well
- Soil Sample Collected (10/03)
- GW Sample Collected (10/03)
- Soil Sample Collected (12/03)
- Soil Sample Collected (12/04)

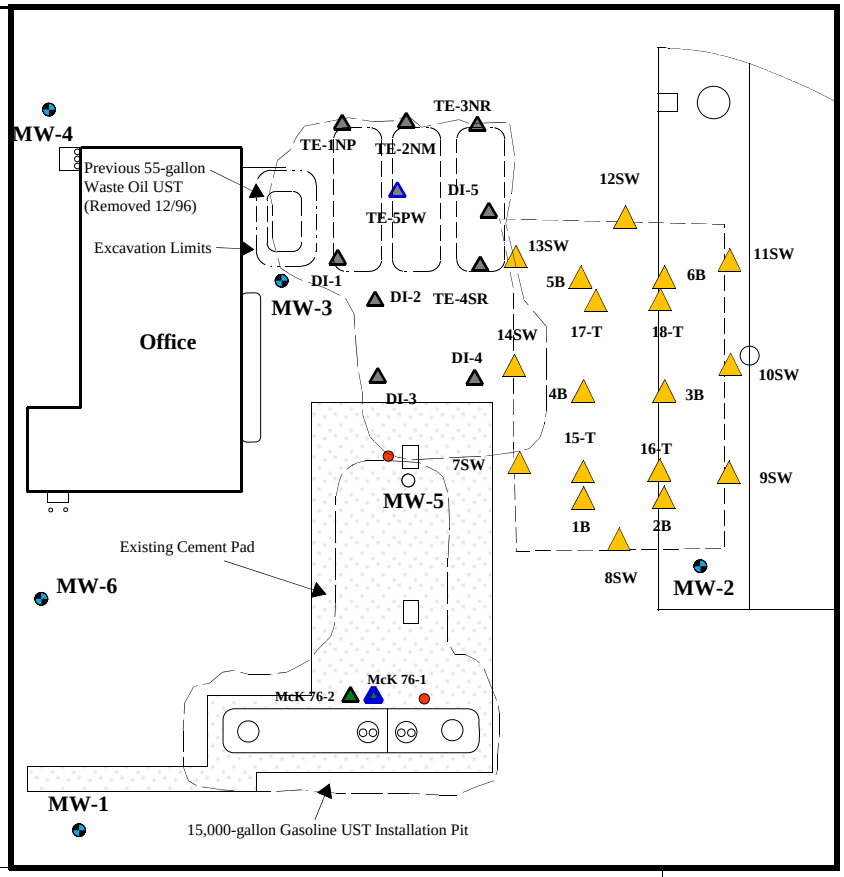
0 30 60

APPROXIMATE SCALE IN FEET

PARKING LOT

GRAVEL DRIVEWAY

NORTH



Apartment Building

Apartment Building

CENTRAL AVENUE

REASOR ROAD

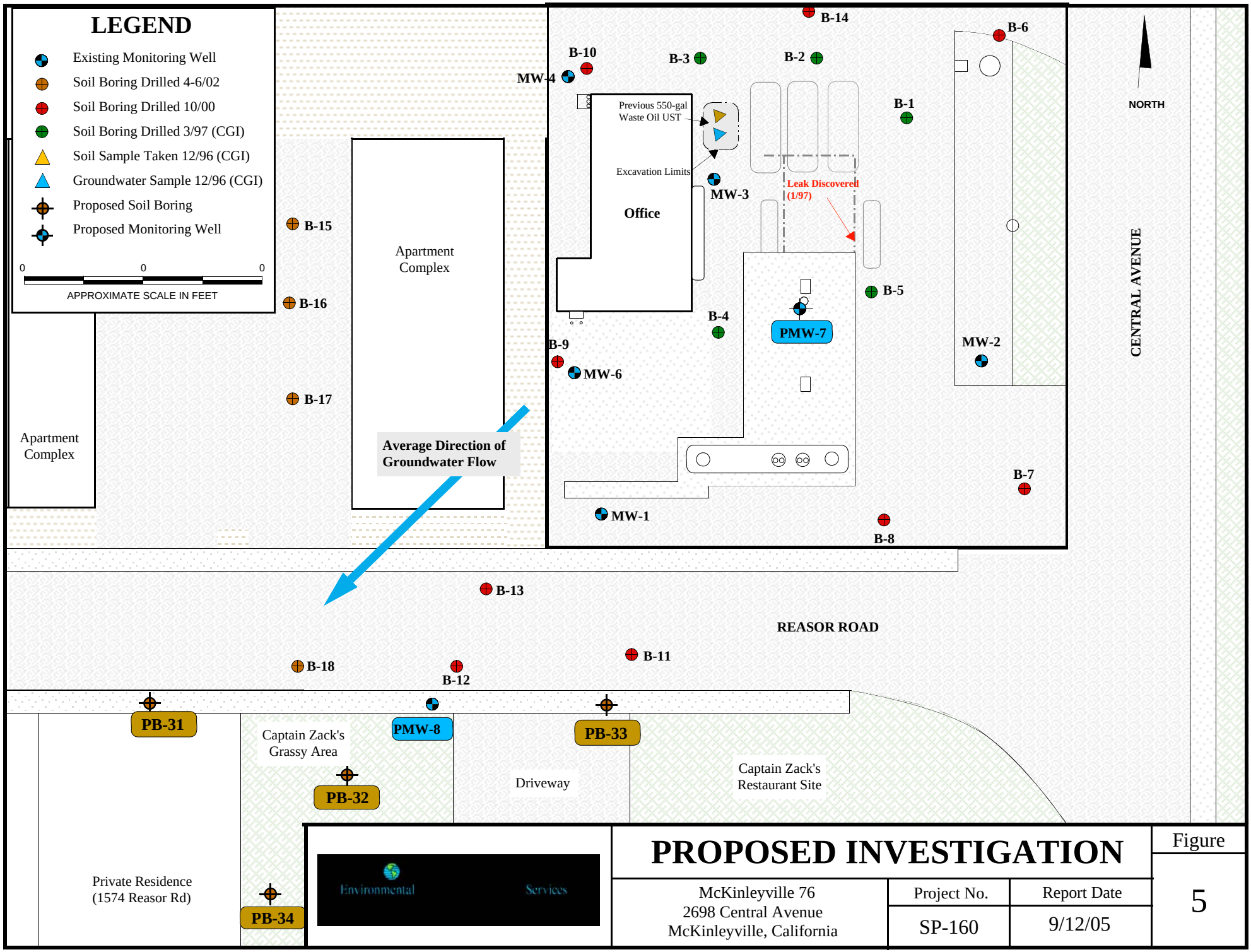
Environmental Services

PREVIOUS EXCAVATIONS

McKinleyville 76
2698 Central Avenue
McKinleyville, California 95519

Project No.	Report Date
SP-160	9/12/05

Figure 4



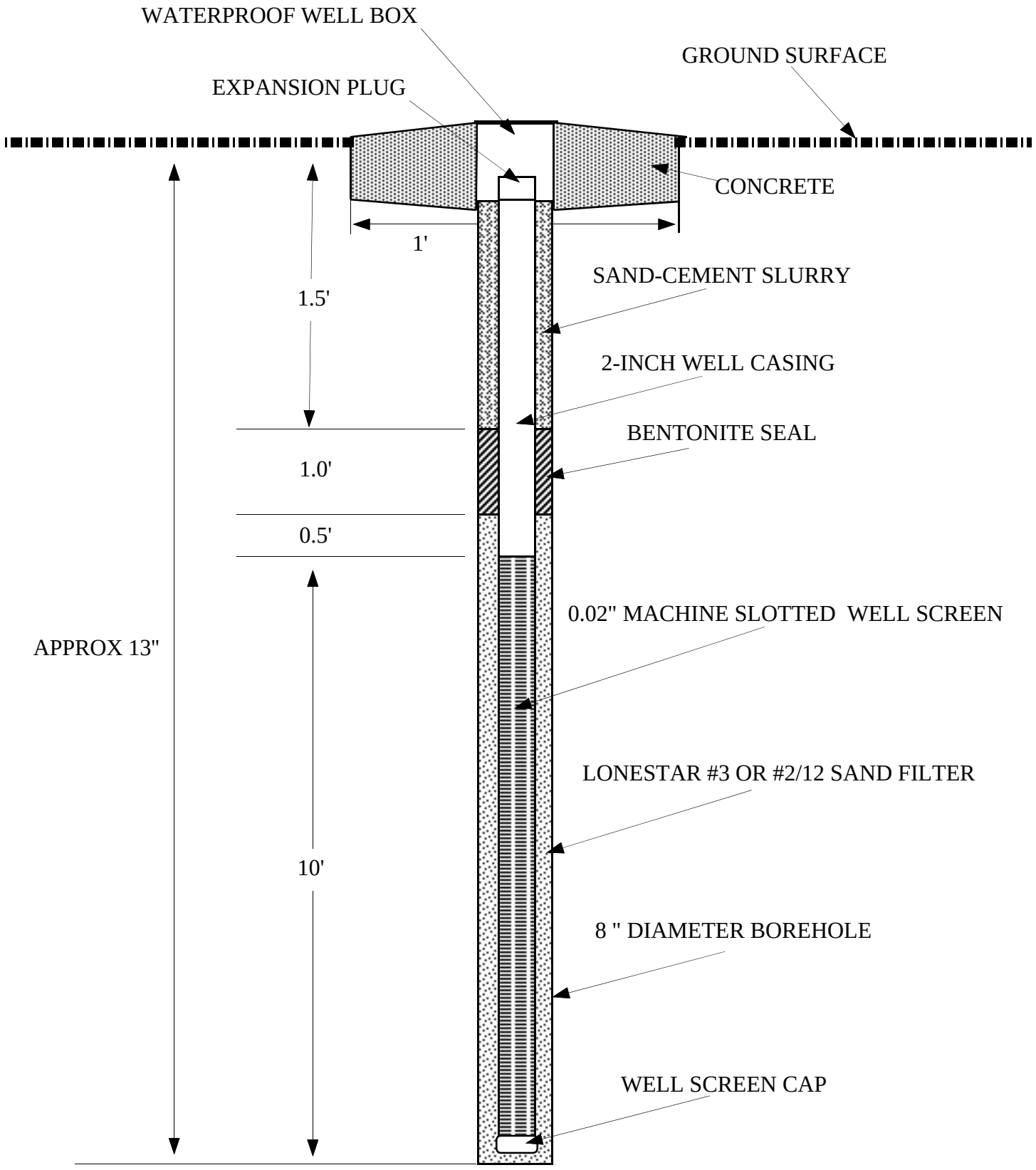
Environmental Services

PROPOSED INVESTIGATION

McKinleyville 76
2698 Central Avenue
McKinleyville, California

Project No.	Report Date
SP-160	9/12/05

Figure 5



Drawing not to scale

	MONITORING WELL CONSTRUCTION DIAGRAM		Figure
Environmental Services	McKinleyville 76 2698 Central Avenue McKinleyville, California 95519	Project No. SP-160	Report Date 9/12/05	6